

## ABSTRACT

A system for detecting load balancing in a distributed processing network is provided that includes:

(a) a memory 204 comprising a baseline topology 216; and

5 (b) a processor 208 operable to:

(i) select, from the baseline topology 216, first and second addresses associated with first and second routers 224 and 228, respectively, wherein the first router 224 has an associated first hop count relative to a selected node 200 and the second router 228 an associated second hop count relative to the selected node 200 and wherein the first  
10 hop count is less than the second hop count;

(ii) transmit at least one test packet, the at least one test packet having a time to live equal to or greater than the second hop count;

(iii) receive at least one response associated with the test packets; and

(iv) determine, based on the at least one response, whether load balancing is  
15 in effect at the first router 224.